NORTH CAROLINA DIVISION OF AIR QUALITY

Application Review

Issue Date: January ##, 2019

Region: Mooresville Regional Office
County: Catawba
NC Facility ID: 1800206
Inspector's Name: Jim Hafner
Date of Last Inspection: 08/23/2018
Compliance Code: 3 / Compliance - inspection

Facility Data

Applicant (Facility's Name): Shurtape Technologies - Hickory/Highland Plt

Facility Address:
Shurtape Technologies - Hickory/Highland Plt
1620 Highland Avenue and 17th Street NE
Hickory, NC 28603

SIC: 2672 / Paper Coated And Laminated, Nec
NAICS: 322222 / Coated and Laminated Paper Manufacturing

Facility Classification: Before: Title V **After:** Title V
Fee Classification: Before: Title V **After:** Title V

Permit Applicability (this application only)

SIP: 15A NCAC 02D .0515, .0521, .1806, 15A NCAC 02Q .0515, 02Q .0501(c)(1)
NSPS: 40 CFR 60 Subpart RR
NESHAP: 40 CFR 63 Subpart JJJJ
PSD: 15A NCAC 02D .0530, Existing PALs for VOC and GHG
PSD Avoidance: N/A
NC Toxics: N/A
112(r): N/A
Other: N/A

Contact Data

Facility Contact	Authorized Contact	Technical Contact
Mark Hawes Director of Environment and Safety (828) 267-8428 PO Box 1530 Hickory, NC 28603+1530	Andy Buckland - Paul Scott Plant Manager (828) 322-2700 PO Box 1530 Hickory, NC 28603+1530	Mark Hawes Director of Environment and Safety (828) 267-8428 PO Box 1530 Hickory, NC 28603+1530

Application Data

Application Number: 1800206.17C and 1800206.18A
Date Received: 12/15/2017 and 6/8/18
Application Type: Renewal and minor mod.
Application Schedule: TV-Renewal

Existing Permit Data

Existing Permit Number: 02218/T35
Existing Permit Issue Date: 10/03/2017
Existing Permit Expiration Date: 09/30/2018

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2016	0.0600	10.72	258.77	9.00	3.37	180.24	176.21 [Toluene]
2015	0.0600	10.83	281.77	9.11	4.51	206.53	202.51 [Toluene]
2014	0.1000	10.47	235.76	8.79	4.30	162.31	159.74 [Toluene]
2013	0.1356	11.31	283.18	9.43	4.12	209.68	207.02 [Toluene]
2012	0.1000	9.80	207.05	8.28	3.46	147.10	144.75 [Toluene]

Review Engineer: Richard Simpson

Review Engineer's Signature: **Date:** January ##, 2019

Comments / Recommendations:
Issue 02218/T36
Permit Issue Date: January ##, 2019
Permit Expiration Date: December 31, 2023

I. Introduction:

Shurtape Technologies, LLC - Hickory/Highland Plant (Shurtape) currently holds Title V Permit No. 02218T35 with an expiration date of September 30, 2018 for a sensitive tape manufacturing facility in Hickory, Catawba County, North Carolina. The primary purpose of this application is for permit renewal and a minor modification. The renewal application 1800206.17C was received on December 15, 2017, which was at least nine months prior to the expiration date, as required by General Permit Condition 3.K. The application was considered complete on that date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

The minor modification application 1800206.18A was received on June 8, 2018 to install a new adhesive coating line. The line will consist of an unwind station, two wed treatment units, adhesive coater, pressure laminator, and a rewind station. Shurtape proposes to also add two insignificant activities which are the drum unloading station and the day tank area. The Permittee shall continue to comply with the existing permit requirements. The renewal and modification will be submitted for comment in one complete step which includes a 30 day public comment period along with a 45 day EPA review in accordance with 15A NCAC 02Q .0501(b)(1).

II. Facility Description

Shurtape operates two plants – Highland plant (Plant 36) and Hickory plant (Plant 33) – at the Hickory site. Because the two plants are under common ownership, on contiguous and adjacent property, and operated under the same Standard Industrial Classification (SIC) code - 2672, the facility is considered one site for permitting purposes.

Shurtape owns and operates a pressure sensitive tape manufacturing facility in Hickory, North Carolina. Both solvent and water-based pressure sensitive tapes are produced at the facility. Adhesive resin is applied to a substrate, primarily paper, on coating lines using continuous rolls (web) of material. The coated web is dried via ovens by evaporating the resin solvent (toluene) or water-based coatings. Additional coatings can be applied to the dried web if necessary. In the last step of production, the dried web is sent to finishing, where the material is sliced and rolled to customer specifications. Other operations at the facility include a rubber grinding and conveying system, adhesive mixers, adhesive and solvent storage tanks, saturant coaters, release coaters, primer coaters, process heat boilers, tape slitters, and various air emission control devices. The facility operates on a 24/7/50 schedule with approximately 250 employees.

III. History/Background/Application Chronology

August 9, 2017 - The facility was inspected by Mooresville Regional Office engineer Jim Hafner. At the time of the inspection, the facility appeared to operate in compliance with all applicable regulations and permit conditions.

October 13, 2017 - Permit application **02218T35** was issued to the facility for a Title V minor modification.

December 15, 2017 - Permit application **1800206.17C** was received for a Title V renewal and a permit acknowledgement was sent to the facility.

June 8, 2018 – Permit application **1800206.18A** was received for a Title V minor modification and a permit acknowledgement with initial approval was sent to the facility on **June 14, 2018**.

August 13-28, 2018 – Phone conversations and emails were made between facility engineer Mark Hawes and DAQ permit engineer Richard Simpson for recommendations and any potential updates since the renewal and minor modification applications.

August 30, 2018 – Held a meeting with facility engineer Mark Hawes at the DAQ central office and discussed more in depth of proposed updated changes to the permit.

October 9-23, 2018 – Phone conversations and emails were made between facility engineer Mark Hawes and DAQ permit engineer Richard Simpson for equipment to be added to the Insignificant Activities list, consolidate, and/or to delete sources.

October 22-November 2, 2018 – The facility, Mooresville Regional Office, and Stationary Compliance Section were requested by the Permitting Section to comment on the renewal. Comments were received and included in the permit from DAQ

November ##, 2018 – DRAFT permit sent to public notice and EPA for review prior to issuance. The 30-day public comment period ended **December ##, 2018** with the receipt of no comments. The 45-day EPA review period ended **December ##, 2018** with the receipt of no comments.

December ##, 2018 – TVEE changes were approved by Ms. Jenny Sheppard TVEE Coordinator.

January ##, 2019 – Permit 02218T36 was issued as an initial Title V source.

IV. Permit Modifications/Changes and ESM Discussion

The following changes were made to the Shurtape Technologies, LLC – Highland Plant, Hickory, Air Permit No. 02218T35:

Page No.	Section	Description of Changes
Cover Letter	N/A	Updated cover letter with application number, permit numbers, dates, fee class, PSD increment statement, and Director name.
NA	Insignificant Activities	To be consistent with the rest of the permit, the dash "-" was removed between the I and E for ID Nos. IES-36-MRT-1, IES-36-BM-1, and IES-36-BM-2.
NA	Insignificant Activities	For the appropriate sources, added a "*" to show that the sources were applicable to the Actual PAL for VOCs. Existing ID Nos. IES-36-BM-1 and IES-36-BM-2 were added to the Actual PAL list in Section 2.3 a.
NA	Insignificant Activities	Per minor modification permit application received on June 8, 2018, added "Web treatment units" with I.D. No. IES-33-WEBTREAT.
NA	Insignificant Activities	Per minor modification permit application received on June 8, 2018 and email description updates on October 18, 2018, added "Drum unload station" with I.D. No. IES-33-DRUMUNLOAD.
NA	Insignificant Activities	Per minor modification permit application received on June 8, 2018, added "Mix vessels" with I.D. No. IES- ADMIX.
6, 8	Section 1	In a previous permit application, the facility had the bulk resin system (ES-33-RS) being controlled by either the carbon absorption system (CD-33-6-10) or the thermal oxidizer (CD-33-56-RTO) "and" fabric filter (CD-33-0-11A). After the source was installed there was not a need to use fabric filter with the other control devices, but the facility would like the option of using the fabric filter. Footnote "c" was added to the source, fabric filter, and located at the bottom of Section 1.
9	Section 2.1 A.	Visible emissions language in the Table were updated to read: "When emissions from the bulk resin system **(ES-33-RS)** is vented to the fabric filter **(CD-33-0-11A)**, 20 percent opacity applies**.** Otherwise, 40 percent opacity applies."
4, 14, 52	Sections 1, 2.1 B., and 2.3	Historical data and calculations reclassify the "Groundwater remediation system" as an Insignificant Activity and the I.D No. was changed to IES-33-GR

Page No.	Section	Description of Changes
4, 14, 52	Sections 1, 2.1 B., 2.2 C., and 2.3	Since sources are similar, consolidated and moved storage tanks ES-33-2-45 to Hickory Plant Raw Storage section. ES-33-2-45 was updated and changed to ES-33-2-45ST. ES-33-2-46, ES-33-2-47, ES-33-2-48 were consolidated into ES-33-2-45ST with the source description changed to "Solvent and resin storage tanks having a total combined capacity of 80,000 gallons".
4, 14, 49, 52	Sections 1, 2.1 B., 2.2 C., and 2.3	Similar sources ES-33-TST-TR2 and ES-33-TST-TR3 were consolidated into existing source ES-33-TST-TR1. The source description was updated to "Toluene transfer racks".
4, 14, 49, 52	Sections 1, 2.1 B., 2.2 C., and 2.3	Similar sources ES-33-MT-21, ES-33-1-02 through ES-33-1-07, ES-33-1-10 through ES-33-1-13, ES-33-1-16, ES-33-2-20, ES-33-2-23, ES-33-2-27 through ES-33-2-33, ES-33-2-25, ES-33-2-19, ES-33-2-34 throughES-33-2-39, ES-33-2-41, and ES-33-42 were consolidated into existing source ES-33-1-01. The source description was updated to "Solvent-based adhesive mixers equipped with water cooled jackets, and adhesive storage tanks with a total combined capacity of 61,000 gallons".
4, 14, 48, 52	Sections 1, 2.1 B., 2.2 C., and 2.3	Similar sources ES-33ST-2, ES-33-53, and ES-33-54 were consolidated into existing source ES-33-33ST-1. The source description was updated to "Adhesive liquid storage tanks having a total combined capacity of 22,000 gallons".
5	Section 1	For ES-33-PRT-TR1, included MACT EEEE. The source was listed correctly in Section 2.2 C.
5, 14, 48, 52	Sections 1, 2.1 B., 2.2 C., and 2.3	Similar source ES-33-2-44 was consolidated into existing source ES-33-2-43. The source description was updated to "Resin storage tanks having a total combined capacity of 7,500 gallons". Per facility permit application updates, the source was added to the MACT EEEE Section 2.2 C.
5, 15, 52	Sections 1, 2.1 C., and 2.3	Similar sources ES-33-IT-2 through ES-33-IT-42 were consolidated into existing source ES-33-IT-1. Historical data and calculations reclassify the source as an Insignificant Activity and was moved to the section. ES-33-IT-1 was changed to IES-33-IT-WB. The source description was updated to "Interior water-based holding, storage, and mixing tanks".
15, 27	Sections 2.1 C. and 2.1. F.	The NSPS Subpart RR regulations were moved to Section 2.2 D. to reduce redundancy and for simplification.
5, 15, 40, 51, 57	Sections 1, 2.1 C., 2.2 B., 2.3 and 2.4	Coating line No. 5 is one source. ES-33-5-02 and ES-33-5-03 were consolidated into existing source ES-33-5-01. The source description was updated to "Coating Line No. 5 consisting of a coating application station, a 12.5 million Btu/hr maximum heat input natural gas/propane-fired oven, and oven dry end hood".
	Section 1	For clarity, MACT Subpart KK was added to Section 1 for ID Nos. ES-33-5-FP and consolidated source ES-36-CL-1.
5, 15, 16, 40, 51, 57	Sections 1, 2.1 C., 2.2 B., 2.3 and 2.4	Coating line No. 6 is one source and is now only water base. Therefore, CD-33-6-10 or CD-33-56-RTO are no longer applicable for this source. ES-33-6-01, ES-33-6-03, ES-33-6-04, and ES-33-6-CT were consolidated into existing source ES-33-6-02. The source description was updated to "Coating Line No. 6 consisting of a water based coating application station and a two natural gas/propane fired adhesive drying ovens with a combined heat input of 24 million Btu/hr and a corona treater (12 kW output)". Due to water base application, CAM requirements in Section 2.1 C.6 no longer apply.

Page No.	Section	Description of Changes
7, 35, 49, 51	Sections 1, 2.1 G., 2.2 C., and 2.3	Similar sources ES-33-SPC-MT2 through ES-33-SPC-MT8 were consolidated into existing source ES-33-SPC-MT1. The source description was updated to "Mixing tanks having a total combined capacity of 4,000 gallons".
7, 15, 41, 51	Sections 1, 2.1 C., 2.2 B., 2.3 and 2.4	Coating line No. 7 is one source. ES-33-07-01 was consolidated into existing source ES-33-07-02. The source description was updated to "Coating Line No. 7 consisting of two water based coating application stations and two natural gas/propane fired drying ovens with a total heat input of 24.5 million Btu/hr".
8, 16, 41, 51	Sections 1, 2.1 C., 2.2 B., and 2.3	Coating Line No. 8 sources ES-33-8-04 and ES-33-8-05 are the same source. Consolidated source ES-33-8-05 into existing source ES-33-08-04. The source description was updated to "Coating Line No. 8 consisting of a coating application station and an oven exit exhaust pick up".
8, 16, 41, 51	Sections 1, 2.1 C., 2.2 B., 2.3, and 2.4	Coating line No. 9 is one source. ES-33-09-01 was consolidated into existing source ES-33-09-02. The source description was updated to "Coating Line No. 9 consisting of two water based coating application stations and two natural gas/propane fired drying ovens with a total heat input of 12.5 million Btu/hr maximum heat input".
8, 16, 41, 51	Sections 1, 2.1 C., 2.2 B., 2.3, and 2.4	Per minor modification permit application received on June 8, 2018, added new source with description of "Adhesive Coating Line No. 10 consisting of coating application station" and a new I.D. No. ES-33-COAT10. The new source is subject to NSPS Subpart RR, MACT Subpart JJJJ and existing PAL for VOCs.
7, 23, 51	Sections 1, 2.1 D., and 2.3	Similar sources ES-33-2-50 and ES-33-2-51 were consolidated into existing source ES-33-2-49. The source description was updated to "Mixing area parts cleaners".
8, 24	Sections 1 and 2.1 E.	The facility request to not have the option to use No. 2 fuel oil in Boiler 1 (ES-36-BLR-B1). Any relevant language that has No. 2 fuel oil has been removed from the permit including Sections of NSPS Dc in Section 2.1 E.4.
8	Section 2.1 E.5.	Deleted old and/or redundant dates in the CAA § 112(j); Case-by-Case MACT for Boilers & Process Heaters section.
8, 27	Sections 1 and 2.1 E.6.	Added MACT Subpart DDDDD regulations for applicable boilers since the initial compliance date is May 20, 2019.
4, 27, 52	Sections 1, 2.1 G., and 2.3	Historical data and calculations reclassify ES-36-POST-1 as an Insignificant Activity. The I.D No. was changed to IES-33-POST-1 and the description was updated to "Process Oil Tank - maximum capacity of 13,000 gallons".
4, 27, 52	Sections 1, 2.1 G., and 2.3	Historical data and calculations reclassify "Twenty-six water-based holding, mixing and flush tanks" as an Insignificant Activity. Since all the sources are similar, consolidated sources ES-36-IT2 through ES-36-IT-26 into existing source ES-36-IT-1. The I.D No. was changed to IES-36-IT-1 and the description was updated to remove the capacity of each tank.
8, 27, 49, 52	Sections 1, 2.1 G., 2.2 C. and 2.3	Historical data and calculations reclassify "Three storage tanks" as an Insignificant Activity. Since the sources are similar, consolidated sources ES-36-WBST2 and ES-36-WBST3 into existing source ES-36-WBST1. The I.D No. was changed to IES-36-WBST1 and the description was updated to "Storage tanks having a total combined capacity of 38,000 gallons."

Page No.	Section	Description of Changes
8, 27, 41, 52, 57	Sections 1, 2.1 F., 2.2 B., 2.2 D., 2.3, and 2.4	The coating line at Highland Plant is one source. ES-36-CL-2, ES-36-CL-3, ES-36-DO-1, ES-36-DO-2, ES-36-DO-3, ES-36-CL-7, ES-36-CL-8, and ES-36-CL-10 was consolidated into existing source ES-36-CL-1. The source description was updated to "Coating line consisting of three coating/printing stations, three natural gas drying ovens with a combined maximum heat input of 17.2 million Btu/hour, and three corona treaters". The Highland coating line ES-36-CL-1 was moved to Section 2.1 C. with the other coating lines subject to the same regulations. The NSPS Subpart RR requirements were moved to Section 2.2 D.
8, 32	Sections 1 and 2.1 I.,	Historical data and calculations reclassify "Two raw materials hoppers and two throat hoppers" as an Insignificant Activity. Since the sources are similar, consolidated sources ES-36-RH-2, ES-36-TH-1, and ES-36-TH-2 into existing source ES-36-RH-1. The I.D No. was changed to IES-36-RH-1 and the description was updated to "Raw materials and throat hoppers".
8, 32	Sections 1 and 2.1 I.	Historical data and calculations reclassify "Four raw materials hoppers and four throat hoppers" as an Insignificant Activity. Since the sources are similar, consolidated sources ES-36-RH-4, ES-36-RH-5, ES-36-RH-6, ES-36-TH-3, ES-36-TH-4, ES-36-TH-5, and ES-36-TH-6 into existing source ES-36-RH-3. The I.D No. was changed to IES-36-RH-3 and the description was updated to "Raw materials and throat hoppers".
8, 32	Sections 1 and 2.1 I.	Historical data and calculations reclassify "Raw materials silo" as an Insignificant Activity. The I.D No. was changed to IES-36-MS-1.
10, 52, 57	Sections 1, 2.3, and 2.4	Boiler No. 6 (I.D. No. ES-33-BLR-B6) will no longer be used at the facility and has been deleted from the permit.
10, 52, 57	Sections 1, 2.3, and 2.4	Per minor modification permit application received on June 8, 2018, the source description for the No. 2 fuel tank was updated to "Storage tank for petroleum hydrocarbon, 3,000 gallon capacity". The I.D. No. changed from ES-36-TK-Oil to ES-36-TK-PET.
10, 52	Sections 1 and 2.3.	Historical data and calculations reclassify "1100 gallon process oil storage tank" as an Insignificant Activity. The I.D No. was changed to IES-POTank.
10, 52	Sections 1 and 2.3.	Historical data and calculations reclassify "Process oil storage tank - 10,000 gallon capacity" as an Insignificant Activity. The I.D No. was changed to IES-33TG016(55).
10, 52	Sections 1 and 2.3.	Each of the petroleum-based liquid storage tanks with an 80 gallon capacity (I. D. Nos. ES-33-SAT#1, ES-33-SAT#7, and ES-33-SAT#9) will no longer be used at the facility and has been deleted from the permit.
10, 52	Sections 1 and 2.3.	Historical data and calculations reclassify "125 gallon water based storage tank" as an Insignificant Activity. The I.D No. was changed to IES-27-WB1.
10, 40, 52, 57	Sections 1, 2.1 K., 2.3 and 2.4.	Calculations reclassify "Two natural gas/propane fired emergency generators (<100 hp, each)" as an Insignificant Activity. The I.D Nos. were changed to IES-GEN1 and IES-GEN2.
10, 39, 52, 57	Sections 1, 2.1 L., 2.3 and 2.4.	Calculations reclassify "130 kW natural gas/propane fired emergency generator" as an Insignificant Activity. The I.D No. was changed to IES-R&D-Gen.
12, 16, 27, 34	Sections 2.1 A.1., 2.1 C.1., 2.1 F.1., 2.1 G.1.	Updated language with the DAQ shell Title V permit conditions for 15A 02D .0515: Particulates from Fuel Miscellaneous Industrial Processes.

Page No.	Section	Description of Changes
13, 18, 25, 28, 35, 36	Sections 2.1 A.2., 2.1 C.3., 2.1 E.3., 2.1 F.3., 2.1 G.2, 2.1 K.2.,	Updated language with the DAQ shell Title V permit conditions for 15A 02D .0521: Control of Visible Emissions.
17, 25, 29, 35	Sections 2.1 C.2., 2.1 E.2., 2.1 F.2., 2.1 K.1.	Updated language with the DAQ shell Title V permit conditions for 15A 02D .0516: Sulfur Dioxide Emissions from Combustion Source.
24	Section 2.1 E.1	Updated language with the DAQ shell Title V permit conditions for .15A NCAC 02D .0503: Particulates from Fuel Burning Indirect Heat Exchanger.
14, 15	Sections 2.1 B., 2.1 C.	Due to similar source regulations and to reduce redundancies, combined previous Section 2.1 C. into current Section 2.1 B.
23	Section 2.2 B.1.e.	Added clarification language that reads: "-According to the methods and procedures in §63.3360(e), the Permittee performed and passed the required performance test to establish the destruction or removal efficiency of thermal oxidizer **(ID Nos. CD-33-56-RTO)** on February 14, 2006."
31	Section 2.2 C.e.i.	Added clarification language that reads: "Existing storage tanks consolidated with similar sources in Permit 02218T36 in Section 2.2 C. above have met the Notification of Compliance Status requirements."
31	Section 2.2 C.f.i.	Added clarification language that reads: "Existing transfer racks consolidated with similar sources in Permit 02218T36 in Section 2.2 C. above have met the Notification of Compliance Status requirements."
32	Section 2.2 D.1.b.	For clarity of NSPS Subpart RR regulations, additional language was added which reads "Otherwise, if Sources listed in Section 2.2 D. above exceed 45 Mg (50 tons) per 12 month period, calculated each month for the previous twelve (12) months, they are subject…".
32	Section 2.2 D.1.h.	Additional information was added for NSPS Subpart RR regulations which read "Due to the process of auto-therming, the RTO operating temperature was established as 1500 ^{o}F, with 1450 ^{o}F being the compliance temperature, above which all three-hour average temperature must remain. The Permittee can reestablish the minimum temperature set point upon retesting and update the permit operating limits as a minor modification in accordance with 15A NCAC 02Q .0515. The permittee may operate within 10% of the current temperature setpoint during testing to reset the operating limits as long as the emission limit is maintained during testing."
28	Section 2.1 G., 2.1 I., and 2.1 L	Pervious Section 2.1 G., 2.1 I., and 2.1 L. were moved to the Insignificant Activities section and no longer in the previous permit.
55	Section 2.3 m.	PAL VOC monthly emission rates were added for minor modification sources drum unloading station (ID Nos. IES-33-DRUMUNLOAD) and adhesive mixing tank (ID Nos. IES-33-ADMIX**).**
59	Section 2.4 h.	PAL CO_2 monthly emission formulas sections were deleted for No. 2 fuel oil since the facility will no longer use the fuel.
62-77	Section 3	The General Conditions were updated to the latest version of DAQ shell version 5.3 08/12/2018.

There were changes made to the Title V Equipment Editor (TVEE) under this permit renewal and modification.

V. Regulatory Review/Equipment Changes

The facility is currently subject to the following regulations:

a. 15A NCAC 2D .0503, "Particulates from Fuel Burning Indirect Heat Exchangers"

b. 15A NCAC 02D .0515, "Particulates from Miscellaneous Industrial Processes"
c. 15A NCAC 02D .0516, "Sulfur Dioxide Emissions from Combustion Sources"
d. 15A NCAC 02D .0521, "Control of Visible Emissions"
e. 15A NCAC 02D .0524, "New Source Performance Standards (40 CFR Part 60 Subpart Dc)"
f. 15A NCAC 02D .0524, "New Source Performance Standards (40 CFR Part 60 Subpart RR)"
g. 15A NCAC 02D .0524, "New Source Performance Standards (40 CFR Part 60 Subpart JJJJ)"
h. 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart KK)"
i. 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart EEEE)"
j. 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart JJJJ)"
k. 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart GGGGG)"
l. 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart ZZZZ)"
m. 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart DDDDD)"
n. 15A NCAC 02D .1806, "Control and Prohibition of Odorous Emissions"

An extensive review for each applicable regulation is not included in this document. The facility's status with respect to all existing regulations has not changed. For a discussion of MACT, CAM, and PSD requirements, see Section 6. The permit will be updated to reflect the most current stipulations for all applicable regulations. Detail changes are noted in the above Table of Changes.

Shurtape Technologies sent permit application **1800206.17C** for a Title V renewal on December 15, 2017 with slight changes to the permit. Boiler No. 6 (I.D. No. ES-33-BLR-B6) is no longer in use at the facility and deleted from the permit. The permit renewal also eliminated the use of No. 2 fuel oil from Boiler 1 and the associated storage tank. The previous permit had NSPS Subpart RR regulations in three different places. An October 23, 2018 email request was made by the facility to consolidate the NSPS Subpart RR regulations and all applicable sources into Section 2.2. Shurtape also requested revisions to the NSPS Subpart RR performance testing operating temperature on the regenerative thermal oxidizers (RTO) language. The NSPS Subpart RR requests were approved. See above Table of Changes for all permit updates.

Shurtape does have concerns about the MACT Subpart JJJJ rule which is currently under EPA residual risk and technology review. EPA is under a court ordered deadline to review and issue their findings. Shurtape believes the MACT language for the RTO combustion chamber temperature should follow that established in NSPS Subpart RR and changes should be made. Shurtape has commented to the EPA about those changes. For this permit, DAQ will wait for an EPA decision on MACT Subpart JJJJ or a memo from the EPA giving approval to make the requested changes.

Shurtape Technologies sent permit application **1800206.18A** for a Title V minor modification on June 8, 2018. The facility requested the addition of a new adhesive coating line. The line consists of an unwind station, two web treatment units, adhesive coater, pressure laminator, and rewind station. There are also insignificant activity sources such as the drum unload station, mix vessels, and web treatments. Potential emissions from the new emission sources are provided in the table below.

Pollutant	**Potential Emissions**			
	Adhesive Coating Line No. 10 (ton/yr)	**Web Treatment Units (ton/yr)**	**Drum Unload Station (ton/yr)**	**Mix Vessels (ton/yr)**
VOC	9.64	--		--
Ozone	--	4.85	0.02	0.02

Notes:
- The VOC emissions from the coating line are based on the largest coating weight, width, and speed to obtain the worst case. Anticipated actual emissions are much less.
- The ozone emission from the web treatments are based on manufacture's emission factor running continuously for 8,760 hours per year.
- The VOC emissions from the drum unload station and the mix vessels are negligible.

This facility is classified as major facility under Prevention of Significant Deterioration (PSD). As shown above, potential emissions of particulate matter (PM) are below PSD significant levels of 40 tons per consecutive 12 months. The permit includes a Plantwide Applicability Limit (PAL) for VOC of 865 tons per consecutive 12 months. The new Adhesive Coating Line No. 10, Drum Unload Station, and Mix Vessels are included in the existing VOC PAL limit. After the proposed modification, the VOC emissions from the facility will remain well below the VOC PAL, and thus, PSD is not applicable to this modification. No other PSD regulated pollutants are emitted from these emission sources.

Further, no hazardous air pollutants (HAPs) nor toxic air pollutants (TAPs) will be emitted from the new emission sources. The minor modification is not subject to an air toxics evaluation under 2D .1100. The Adhesive Coating Line No. 10 is subject to NSPS Subpart RR and MACT Subpart JJJJ noted in Section VI below.

After further discussions with the facility, a request was made to make the permit simpler and cleaner by grouping similar sources and/or deleting sources that were no longer in use. Approximately 117 similar sources were grouped with sources of the same description, 14 sources were moved from Significant Sources and reclassified as Insignificant Activities, and 4 sources were deleted. Please see Table of Changes above for specific details.

VI. NSPS, NESHAPS/MACT, PSD, 112(r), CAM, BART

NSPS

The facility is subject to the New Source Performance Standards (NSPS) listed below. This renewal and modification does not affect the NSPS status of the facility

NSPS Subpart Dc

The three natural gas/propane fired boilers (ES-33-BLR-B1, ES-33-BLR-B5, and ES-33-BLR-Temp) are subject to the "NSPS for Small Industrial, Commercial, Institutional Steam Generating Units," 40 CFR Part 60 Subpart Dc. Boiler No. 1 will no longer burn No. 2 fuel oil, thus the NSPS SO_2 limit no longer applies. This renewal does not affect the NSPS status of the facility.

40 CFR 60 Subpart RR

The pilot coater lines (ID Nos. ES-33-0-01 and ES-33-PC-2), the water-based coating line (ID Nos. ES-33-09-02), coating line No. 8 (ID Nos. ES-33-8-02, and ES-33-8-04), coating line No. 5 (ID Nos. ES-33-5-01 and ES-33-5-FP), and the Highland plant coating line (ID No. ES-36-CL-1), pilot scale research and development calendar (ID No ES-PD1-CAL1), and coating line No. 10 (ES-33-COAT10) were constructed after December 30, 1980. Thus, these emission sources are subject to the NSPS for Pressure Sensitive Tape and Label Surface Coating Operations, 40 CFR 60 Subpart RR. The other coating operations pre-date the applicability date of Subpart RR and/or utilize only water-based materials.

Shurtape has elected to comply with 40 CFR 60 Subpart RR as described below. The current permit, Air Permit No. 02218T32, reflects these options:

- For the pilot coaters (ID Nos. ES-33-0-01 and ES-33-PC-2), coating line No. 9 (ID Nos. ES-33-09-02), pilot scale research and development calendar (ID No ES-PD1-CAL1), coating line No. 10 (ES-33-COAT10), and Highland plant coating line (ID No. ES-36-CL-1), the emission limits in 40 CFR 60.442(a) of NSPS Subpart RR do not apply to these sources because the VOC as applied in coatings is less than 45 Mg per 12 month period. All other requirements under NSPS Subpart RR apply to these sources. The permit regulations are in Section 2.1 C.4. and 2.1 F.4
- For coating line No. 5 (ID Nos. ES-33-5-01 and ES-33-5-FP), coating lines No. 8 (ID Nos. ES-33-8-02 and ES-33-8-04), coating line No. 10 (ES-33-COAT10), the current permit lists all three allowable emission limits of Subpart RR. The permit references emissions of no more than 0.20 kilograms VOC per kilogram of coating solids applied (weighted average during a calendar month period), an overall VOC emission reduction of at least 90% (calculated over a calendar month period), and an overall VOC emission reduction of at least that percent calculated pursuant to 40 CFR 60.443(b) but not to exceed 90%. The permit regulations are in Section 2.1 C.5.

40 CFR 60 Subpart JJJJ

The two emergency engines (ID Nos. IES-GEN1 and IES-GEN2) will be rich burn engines that burn natural gas or propane (LPG). Each will be greater than 25 hp and less than 100 hp. Further, they will be manufactured after the applicability dates in the rule. As such they are subject to NSPS Subpart JJJJ. Shurtape has purchased EPA certified engines to ensure compliance with 40 CFR 60.4231(c) under NSPS Subpart JJJJ.

NESHAPS/MACT

40 CFR 63 Subpart KK

Shurtape has elected to exclude the coating line 5 flexographic printer (ID No. ES-33-5-FP) and the Highland Plant coating/printing station (ES-36-CL1) from the NESHAP for the Printing and Publishing Industry, 40 CFR 63 Subpart KK, as allowed under 40 CFR 63.821(a)(2)(ii). To exclude these emission sources, the facility must ensure that the quantity of inks, coatings, etc. applied by these sources does not exceed five percent of the total amount of inks, coating, etc. applied on the associated coating line. The facility also must keep material usage records. No changes to the permit condition are required under this renewal and minor modification.

40 CFR 63 Subpart EEEE

Numerous tanks and loading racks at the facility are subject to NESHAP for Organic Liquids Distribution (Non-Gasoline), 40 CFR 63 Subpart EEEE. Due to the size of the tanks (i.e., less than 5000 gallons) and/or the vapor pressure of the material stored in the tanks, the facility is not required to comply with the control requirements under MACT Subpart EEEE. Also, the loading racks are not subject to control requirements because none of the loading racks have a total actual annual facility-level liquid loading volume greater than or equal to 800,000 gallons. Shurtape is only required to comply with the notification, recordkeeping, and reporting requirements in sections 40 CFR 63.2343(a) through (d). Requirements to submit a Notice of Compliance Status (NOCS) have been met with the first compliance report submitted on June 7, 2006.

40 CFR 63 Subpart JJJJ

The facility is a major source for HAPs. Hickory plant coating lines Nos. 5, 6, 7, 8, 9; and 10, the Hickory plant coating line No. 5 flexographic printer; pilot coater No. 1, and the Highland plant coating line are subject to NESHAP for Paper and Other Web Surface Coating (POWC), 40 CFR 63 Subpart JJJJ.. The facility has elected to comply with the MACT Subpart JJJJ by limiting organic HAP emissions to no more than 20 percent of the mass of coating solids applied for each month. The table below summarizes the methods used to for compliance with MACT Subpart JJJJ.

Area Used	Source/Coating Line	Control Method	Discussion	Method for Determining Compliance
Hickory Plant-WB	ES-33-06-03 ES-33-06-04 ES-33-07-02 ES-33-09-02	Water-based usage, uncontrolled	Uncontrolled sources	Equation 6 under 40 CFR 63.3370(d): Monthly allowable HAP applied
Hickory Plant-SRS	ES-33-5-01 ES-33-8-02 ES-33-8-04	Controlled by Solvent Recovery System (SRS)	Always controlled by SRS	Equations 7 and 8 under 40 CFR 63.3370(i): Liquid-to-liquid material balance
Hickory Plant – RTO	ES-33-5-01	Controlled by RTO	Never-controlled	Equation 14 under 40 CFR 63.3370(o): intermittently and never controlled work stations

Area Used	Source/Coating Line	Control Method	Discussion	Method for Determining Compliance
Flexographic Printer Pilot Coater No. 1 Coating Line No. 10 Highland Coating Line	ES-33-5-FP ES-33-0-01 ES-33-COAT10 ES-36-CL-1	Treated as an uncontrolled source	Uncontrolled	Equation 6 under 40 CFR 63.3370(d): Monthly allowable HAP applied

The Highland plant coating lines and coating line No. 5 both have RTOs as controls. As noted in the table above, the RTOs are not used to demonstrate compliance with MACT Subpart JJJJ but will remain as control option under the permit condition. If the facility decides to use the RTOs to demonstrate compliance with MACT Subpart JJJJ in the future, Shurtape must conducted performance testing for both RTOs as indicated in the permit.

New Coating Line No. 10 will meet the requirements of liquid-liquid material balance in 40 CFR 63.3350(d)(2) to comply with emission standard in 40 CFR 63.3320(b)(3) as shown in permit Sections 2.2 B.1.k.n,r, and u. The POWC NESHAP allows the exclusion of materials with HAP contents less than 0.1% for OSHA defined carcinogens and less than 1% for other organic HAP compounds. The two proposed coatings have 0.075% VOC and 0.013% VOC respectively. The proposed materials would be exempt from inclusion in POWC calculations since HAP content is below these thresholds.

40 CFR 63 Subpart ZZZZ

All three generators at the facility (ID Nos. IES-R&D-Gen, IES-GEN1 and ES-IGEN2) are subject to the NESHAP for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63," MACT Subpart ZZZZ. The generators were constructed after June 12, 2006. As provided under in 40 CFR 63.6590(c), new stationary RICEs that are less than 500 hp and are subject to 40 CFR Part 60 Subpart JJJJ must meet the requirements of MACT Subpart ZZZZ by meeting the requirements of 40 CFR part 60 subpart JJJJ. Emergency generator ES-R&D-Gen is not subject to NSPS Subpart JJJJ because of its manufacture date is May 2007. In essence, this emergency generator has no requirements to comply with MACT Subpart ZZZZ.

40 CFR 63 Subpart GGGGG

The ground water remediation system (ID No. IES-33-GR) is a combined soil vapor extraction (SVE) and air sparging (AS) system. The SVE system, which is the portion of the system that generates point source air emissions, began operation in November 1994. The remediation system is subject to NESHAP for Site Remediation, 40 CFR Subpart GGGGG. The facility has determined that the quantity of HAPs contained in the remediated material is less than 1 Mg per year. As such, only the recordkeeping requirements of Subpart GGGGG apply to this source, as specified in 40 CFR 63.7881(c). Based on historical inventories and calculations, the source has been reclassified as an insignificant activity. No changes are needed under this permit renewal and minor modification.

CAA § 112(j); Case-by-Case MACT for Boilers & Process Heaters

The boilers (ID Nos. ES-33-BLR-B3, ES-33-BLR-B4, ES-33-BLR-B5, ES-33-BLR-TEMP, and ES-36-BLR-B1) are subject to 2D .1109, Case-by-Case MACT requirements. These boilers fire natural gas and/or propane. Shurtape is required to conduct annual inspections and tune-ups of the boilers under 2D .1109. The facility has to comply until May 19, 2019 and after that date, the facility has to be in compliance with the NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD. No changes are needed under this permit renewal and minor modification.

40 CFR 63 Subpart DDDDD

The boilers (ID Nos. ES-33-BLR-B3, ES-33-BLR-B4, ES-33-BLR-B5, ES-33-BLR-TEMP, and ES-36-BLR-B1) are subject to 40 CFR 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions. These boilers fire natural gas and/or propane. The Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019. The facility must submit a Notification of Compliance Status to the DAQ per permit Section 2.1 E.6.e. For **(ID Nos. ES-33-BLR-B3, ES-33-BLR-B4), e**ach biennial tune-up shall be conducted no more than 25 months after the previous tune-up and shall submit compliance

reports to the DAQ on a 2-year basis. For **(ID Nos. ES-33-BLR-B5, ES-33-BLR-TEMP, and ES-BLR-B1**), each annual tune-up shall be conducted no more than 13 months after the previous tune-up and shall submit compliance reports to the DAQ on an annual basis.

NSR/PSD

The facility has accepted Actuals PALs for VOC and GHG. The Actuals PAL for VOC was added under Air Permit No. 02218T30 issued on June 21, 2011, and the Actuals PAL for GHG was added under Air Permit No. 02218T31 issued on November 8, 2011. Under the Actuals PALs, Shurtape can make modifications or additions to the PAL emissions units without requiring a modification to the PAL provisions, provided the total VOC or GHG emissions after modification remain below the Actuals PALs. The Actuals PAL for VOC is 865 tons per rolling 12 months and the Actuals PAL for GHG is 114,271 per rolling 12 months. Per October 5, 2017 NCDAQ letter, there is a requirement that every five years a determination is to be made for revalidation of the emissions factors or data utilized in calculating VOC emissions for the various emissions units. There is no change to the VOC PAL for this renewal. As shown on page 1, emissions from the facility are far below the VOC and GHG Actuals PALs. The new coating line No. 10, the drum unloading, and the mixing vessels were included in the existing PAL.

112(r) – The facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the Rule. This permit renewal and minor modification does not affect this status.

CAM – 40 CFR Part 64 is applicable to any pollutant-specific emission unit, if the following three conditions are met:

1. The unit being controlled is subject to a non-exempt emission standard
2. The unit uses any control device to achieve compliance with any such emission limitation or standard.
3. The unit precontrol potential emission rate exceeds either 100 tons/yr (for criteria pollutants) or 10/25 tons/yr (for HAPs).

In the past permit review, coating line No. 5 and coating line No. 8 are subject to NSPS Subpart RR, which requires Shurtape to indicate compliance on the coating lines every month to determine VOC emission reduction or percentage reduction requirements. In particular, 40 CFR 60.443(f) specifies that "a separate compliance test is completed at the end of each calendar month after the initial compliance test." This requirement is included in the Title V permit. NC DAQ considers this NSPS requirement as a continuous compliance determination method (CCDM) as per 64.2(b)(1)(vi). Therefore, coating line No. 5 and coating line No. 8 are exempt from CAM.

In the previous permit, Shurtape's solvent based coating line No. 6 (ID Nos. ES-33-6-01 and ES-33-6-02) did meet the three criteria cited above and was subject to CAM. However, the coating line No. 6 no longer uses the solvent based coating and now uses the water based coating. CD-33-6-10 or CD-33-56-RTO are no longer applicable for this source. Therefore, the previous solvent based coating line No. 6 (ID Nos. ES-33-6-01 and ES-33-6-02) and the facility is no longer subject to any CAM requirement. Since coating line No. 6 is one source, ES-33-6-01, ES-33-6-03, ES-33-6-04, and ES-33-6-CT were consolidated into existing source ES-33-6-02.

VII. Facility Wide Air Toxics (State Enforceable Only)

In previous permit modifications, an Toxic Air Pollutants evaluation was made that determined the facility did not present an unacceptable risk to human health. The air toxics limits were removed from the permit under Air Permit No. 02218T32 issued on December 12, 2012. This permit renewal and minor modification does not affect this status.

VIII. Facility Emissions Review

The actual emissions of the last five years are listed in the first page of this review.

IX. Compliance Status

During the most recent inspection, conducted on August 23, 2018 by Jim Hafner of the MRO, the facility appeared to be in compliance with all of the applicable requirements. The have been no compliance issues within the past five years.

X. Public Notice/EPA and Affected State(s) Review

A thirty-day public notice period and a forty-five-day EPA review period is required for this modification of the Title V permit. A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to the EPA. Also pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above

EPA's 45 Day Review period

Ms. Heather Ceron (U.S. EPA, Region IV) was provided a PROPOSED permit for review on November ##, 2018. EPA 45-day review period ended on January ##, 2019. No comments were offered or received.

Public Notice

The 30-day public notice of the PROPOSED permit was posted on the NCDAQ website on November ##, 2018. No comments were offered or received.

XI. Other Regulatory Considerations

- A P.E. seal from Trinity Consultant representative Dana Norvell (No. 028884) was applied to the minor modification dated June 8, 2018 for the minor modification application.
- A consistency determination was sent on July 7, 2018 to the City of Hickory and approved the same date by Cal Overby, Assistant Planning Manager.
- An application fee was required and received for the minor modification.
- Catawba County has not triggered increment tracking under PSD for any pollutants, so no tracking is required

XII. Recommendations

The permit renewal application for Shurtape Technologies - Hickory/Highland Plant in Catawba County, North Carolina has been reviewed by DAQ to determine compliance with all procedures and requirements. The DAQ has determined that this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. The DAQ recommends the issuance of Air Permit No. 02218T36.